

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

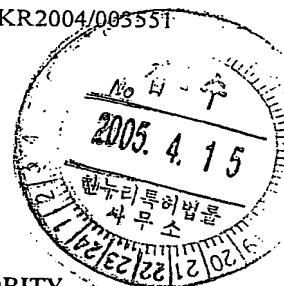
LEE, Sang-Hun

Hannuri Patent and Law Office, Suite 303, Back-Ak Bldg.,
828-53, Yoksam-dong, Kangnam-ku, Seoul, 135-080,
Republic of Korea

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)



Date of mailing
(day/month/year) 14 APRIL 2005 (14.04.2005)

Applicant's or agent's file reference
pct4010

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/KR2004/003551

International filing date (day/month/year)

31 DECEMBER 2004 (31.12.2004)

Priority date(day/month/year)

31 DECEMBER 2003 (31.12.2003)

International Patent Classification (IPC) or both national classification and IPC

IPC7 C08G 63/40

Applicant

SK CHEMICALS CO., LTD. et al

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/KR



Korean Intellectual Property Office
920 Dunsan-dong, Seo-gu, Daejeon 302-701,
Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

BAHN, Yong Byung

Telephone No. 82-42-481-5539



**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2004/003551

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing
☐ table(s) related to the sequence listing

b. format of material

- ☐ in written format
☐ in computer readable form

c. time of filing/furnishing

- ☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/KR2004/003551

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>1-6</u>	YES
	Claims	<u>NONE</u>	NO
Inventive step (IS)	Claims	<u>NONE</u>	YES
	Claims	<u>1-6</u>	NO
Industrial applicability (IA)	Claims	<u>1-6</u>	YES
	Claims	<u>NONE</u>	NO

2. Citations and explanations :

Reference is made to the following document:

D1 : US 4,696,998 A (General Electric Co.)

The present invention according to claims 1-6 relates to a method for preparing polyester copolymer containing amide link, which can reduce the phase separation of a polyester component and an amide component by improving the compatibility therebetween. It comprises the step of polymerizing macrocyclic polyester oligomer and cyclic amide monomer.

Document D1 discloses new cyclic carbonate compositions which may be polymerized to polycarbonate copolymers, and methods for their preparation and polymerization. Various polycarbonates copolymers are given. These include polyester-polycarbonate, ether-polycarbonates and polyamide-polycarbonates.

D1 is considered to represent the most relevant state of the art. Comparing claims 1-6 with D1, both inventions are the same in preparing polyester copolymer containing linkage such as amide. Here, D1 is different from the subject matter of claims 1-6 in using the polycarbonate oligomer instead of polyester oligomer. However, it is generally known to the person skilled in the art that this oligomer is an interchangeable component where circumstances make it desirable. So, claims 1-6 are trivial and not capable of supporting the requirements of inventive step under PCT Article 33(3).

Therefore, claims 1-6 are novel and also appear to be industrially applicable, but not inventive.